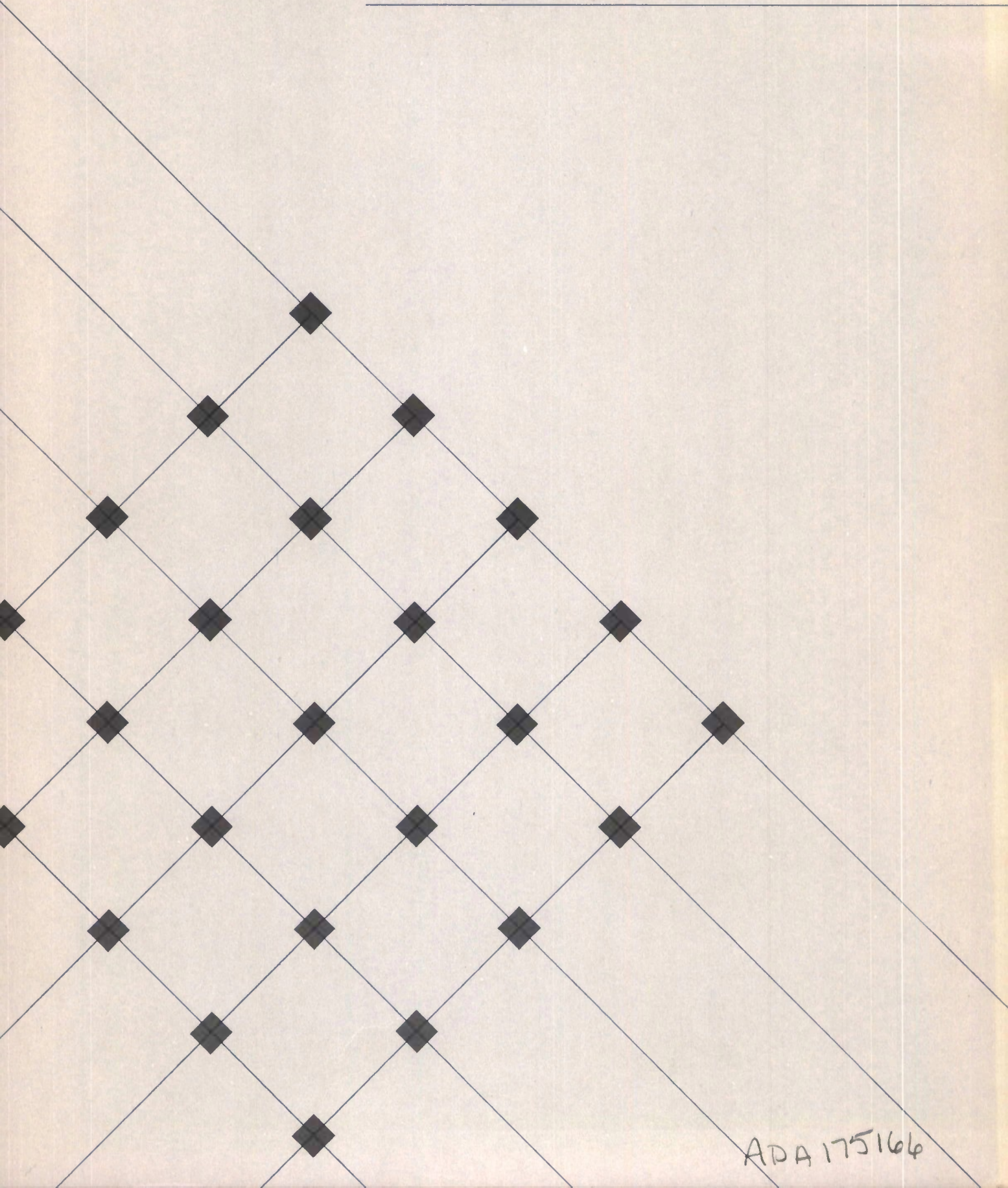




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Understanding the Implications of Selling Rights in Software to the Defense Department: A Journey Through the Regulatory Maze

by

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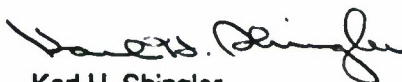
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FOR THE COMMANDER



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Understanding the Implications of Selling Rights In Software to the Defense Department:

A Journey Through the Regulatory Maze

Pamela Samuelson

Abstract. This article of the Software Licensing Project of the SEI examines problems related to DoD procurement policy as reflected in the DoD acquisition regulations (DoD FAR SUPP). This article discusses ambiguities and inconsistencies found in the acquisition regulations, and ways in which these problem areas might result in unexpected disadvantages to both the government and industry. Issues related to funding of software development, treatment of technical data and documentation, the concept of unlimited rights, the making of derivative works and other modifications of software, and the interface between DoD acquisition policy and intellectual property laws (such as copyright and trade secret law) are discussed. The article serves to catalogue potential problems that might arise under the DoD acquisition regulations.

The Defense Department has in recent years been sponsoring the development of a large number of very sophisticated software systems. Many companies are interested in exploring the possibility of participating in one or more DoD-sponsored software development projects. Small firms, in particular, may be drawn to DoD as a source of funding for large scale projects, perhaps hoping that the software developed for the military will also (at least with some modifications) have a significant commercial market. The company may think it worthwhile to take DoD funding because that will pick up the initial development costs, and then profits can be made on commercial sales.

One of the perceived drawbacks to making such a deal with the Defense Department is the "data rights" policy the Department has adopted to allocate and administer what rights the government and its contractors will have as to software acquired by the government. The DoD data rights policy is often decried as "confiscatory" by industry people, although just how and to what extent it is "confiscatory" is not well understood. Given the length and complexity of the standard data rights clause that DoD inserts in virtually all of its software acquisition contracts, it is not surprising that many industry people do not know the full implications of the clause. This article will set forth as simply and clearly as the author's capabilities permit what rights contractors are likely to have - and not have - when selling rights in software to the Defense Department. The article will also assess the potential risks of negotiating non-standard contract terms with special contractual language. Not all such special language may be enforceable for reasons set forth at some length below.

Limits on Flexibility

There are many places one can begin this examination of the standard data rights policy. This article will begin with pointing out how little flexibility DoD's own contracting personnel seem to have under the current procurement regime. The regulations say that the standard data rights

clause is to be incorporated into every software acquisition contract into which the Defense Department enters, unless a formal "deviation" is granted owing to special circumstances. The mandatory nature of the standard data rights clause is an important limit on the ability of contracting personnel to reach agreements that contravene clear mandates of the standard clause.

This is not to say that the clause is completely inflexible. One can, for example, negotiate a special set of terms to control the government's use of privately developed software so long as the government still has the four minimum rights prescribed in the standard clause. But an agreement purporting to take away from the government one of the four standard minimum rights would be of questionable validity absent authorization for a deviation. Similarly, a specially negotiated arrangement which would give the government less than "unlimited rights" in software funded in whole or in part with federal money would be of questionable validity. If the standard data rights clause is included in a government contract (or, for that matter, a subcontract), the mandatory clause seems likely to prevail over any contradicting specially negotiated provisions if a dispute between the parties over rights arises in the future.

Conflicts Between The Standard Clause and Special Clauses

The policy reasons that support enforcement of the standard data rights clause over a specially negotiated clause are straightforward: The Defense Department buys a tremendous volume of software (and other items). It needs a way of predicting with some certainty what minimum rights it will have in this property. The standard data rights clause is the vehicle for obtaining such assurances. It is required to be used by agency regulations; it is itself a regulation. (It is well to remember that agency regulations have the force and effect of law.) The standard clause sets forth the basic transactional rules that the government has decided are necessary to protect its interests. Because there is a way within the regulations to alter the standard data rights policy, namely the formal deviation, specially negotiated terms that contradict the standard clause might well be found ineffective when the deviation process was not used to obtain the right to an exception. This policy argument would seem to apply equally to subcontracting situations as to prime contractor situations.

Nevertheless, there may be some instances in which a software company and DoD contracting personnel have gone ahead and entered into special arrangements in which the standard data rights clause may be incorporated by reference and in which separate clauses contradicting part of this standard clause will also appear. The government contract officer and the industry representative may have between themselves reached an understanding that the specially negotiated language will govern. In many and perhaps most instances, the deal may go smoothly and no disputes about rights will arise. In the event of a dispute, the Defense Department might well take the position that the standard data rights clause prevails over the specially negotiated terms for the policy reasons discussed above. It may also argue the contract officer (or the prime contractor in the subcontract situation) had no authority to make special arrangements without getting a deviation. The inequity of subjecting a firm to vastly different terms than it had agreed to would probably give way to the larger policy underlying the procurement regulations. This is a potential risk for firms that sell rights in software to the government.

Different Treatment for Software and Its Associated Documentation

There are many features of the DoD standard data rights clause that differ from standard commercial practices. One important example of this is in the different treatment accorded to machine-readable code and to software documentation. DoD defines "software" in such a way as to encompass only machine-readable code; software documentation is considered to be "technical data."

If both the machine-readable code and documentation have been developed (at least in part) at public expense, the separate classification of machine-readable code and documentation will matter very little because the government will claim the same "unlimited rights" in both. If they have instead been developed wholly at private expense, however, the machine-readable code will be subject to a tighter set of restrictions than the documentation (except if the software is an off-the-shelf commercial product).

Privately developed machine-readable code purchased by DoD must be acquired with four standard minimum "restricted rights" in the government. They are: (1) the right to use it in the computer or facility for which it was obtained, (2) the right to use it in a backup computer if the intended use computer is inoperable, (3) the right to make a backup copy of it, and (4) the right to modify it. Privately developed software documentation will typically be acquired with "limited rights" in the government which means that the government will have the rights to use, copy, and disclose it throughout the government, and in emergency repair situations, to have these same acts performed by outsiders. (The exceptions to this general rule, for commercial software and for manuals or instructional material needed for installation and training are discussed in a later section.)

It should be readily apparent that DoD's discrepant treatment of privately developed machine-readable code and its documentation is at odds with commercial practice, which tends either to treat software and documentation the same, or to treat documentation more restrictively than executable code. This is a feature of DoD's policy that warrants careful consideration by software firms supplying software and documentation to the government.

Public vs. Private Funding of Software

Undoubtedly the most important distinction in the DoD standard data rights clause is that between "publicly funded software" and "privately developed software." The government will claim "unlimited rights" in any software and documentation developed with public funding; it will treat as "proprietary" any software developed at private expense.

The DoD takes an "all or nothing" approach in these situations. That is, no matter how much of a private firm's own money has gone into the development of a piece of software, and no matter how valuable that software or its prototype may be, if even one dollar of DoD money has gone into the software's development fund, the government will claim unlimited rights in that software and documentation. This policy is sometimes viewed by industry as particularly inequitable when

the DoD money has paid only for slight modifications to the code which were necessary to make the software suitable for government purposes. Industry has been trying for many years to alter this policy.

Indeed, recent legislation seems to call for the establishment of some form of middle ground alternative for mixed funding situations. The newly proposed Federal Acquisition Regulations (FAR) would, for example, permit the government and a contractor to make arrangements for the government to get less than unlimited rights when both supply funds for the development of software. The new FAR would also permit firms to retain "privately developed" status for software that has been slightly modified by a contractor to make it suitable for government use. This is not, however, the Defense Department's policy, as reflected in the current DoD FAR Supplement and under the proposed amendments to it.

Unlimited Rights: What Does That Mean Vis-a-Vis Ownership?

As indicated above, the standard data rights clause provides that if DoD provides funding for any part of the development costs for software, it will claim "unlimited rights" in the software and its associated documentation. There seems to be some confusion within DoD, as well as in the industry, about what the meaning of unlimited rights is vis-a-vis an ownership interest. Many people seem to think that unlimited rights is equivalent to an ownership interest.

It appears, from a close examination of the standard data rights clause, that this assumption is not accurate. The definition of unlimited rights under the DoD clause makes no mention of an ownership interest. "Unlimited rights" is defined in the standard data rights clause to mean only the rights to use, duplicate and disclose software and its documentation in any manner and for any purpose and to have or permit others to do the same. While this is surely a very broad license, it appears that it is not an ownership interest. In intellectual property law, ownership rights are defined in terms of rights to exclude other people from doing one or more things with the property; the definition of unlimited rights confers no rights to exclude on the government. Furthermore, a close reading of the DoD procurement policy regulations reveals that when DoD wants to try to take an ownership interest in software, it should use the "special works" clause instead of the standard data rights clause.

The Effect of Use of a Special Works Clause

The DoD special works clause purports to give to the government an ownership right and a direct copyright interest in software or other work prepared under a government contract in which this clause is used. The clause claims this direct copyright interest by claiming that the work prepared by the contractor under the clause is a "work made for hire" under the copyright law. Unfortunately, the DoD special works clause, insofar as it purports to give the government a direct copyright interest in software, may be ineffective for this purpose because it conflicts with the copyright law in two respects: (1) software is not a category of specially commissioned work that qualifies for the "work made for hire" rules, and (2) the copyright law specifically prohibits the

government from directly owning copyrights (see 17 U.S.C. Section 105). The effect of putting the DoD special works clause in a software development contract would seem to be to put the software and associated documentation in the public domain. Use of the special works clause seems to nullify the contractors right to claim ownership in the software.

How Broad Is The Unlimited Rights License?

How broad the government's rights are when it has unlimited rights in software might seem a tritely simple question, but it's not. Some procurement personnel tend to interpret the term as if it was tautologically defined (i.e., that "unlimited rights" means "unlimited" rights.) But the DoD's own definition of the term is limited to three basic rights: the rights to use, duplicate, and disclose the software. The most glaring omission from the definition is that relating to rights to prepare derivative works. Derivative works are defined broadly by the copyright law. There is as yet little case law to provide guidance as to the scope of this concept vis-a-vis software but it would seem to include all modifications, enhancements, translations into other programming languages, and the development of additional programs using parts of the original code (i.e., reusability of software.) Although DoD might argue that a derivative works right is implicitly included in the DoD rights, it is at least conceivable that a court might find that the DoD does not obtain the right to make derivative works of copyrighted material when it has unlimited rights. DoD's argument for implicit inclusion is weakened because the newly proposed FAR does define unlimited rights to include a right to make derivatives.

If firms that have developed software with government funds retain the right to control the government's preparation of derivative software, that would certainly be an important limitation on the government's rights. It is simply unclear whether this is so.

Contractor-Prepared Derivatives of Unlimited Rights Software

As important a question as may be the government's right to prepare derivative software, an even more important question from industry's perspective may be whether the government will have any rights-- or perhaps even unlimited rights -- in any contractor-prepared derivative software intended for the commercial market. If DoD funds have paid for development of the original software and if some part of the original software is traceable in the derivative software, some DoD personnel might argue that the government will (or should) have unlimited rights in the derivative software as well -- despite the fact that delivery of derivative software may never have been called for under any contract.

The problem of what it might mean for the government to have unlimited rights in non-deliverables is always a thorny one, but in the context of derivative software, it could cause considerable concern. How a court would resolve a dispute of this sort is difficult to predict. It might seem inequitable to the software industry for the government to claim broad rights in derivative software whose delivery they never bargained for. However, DoD might very well take the position that the government can and should exercise rights to derivative software.

The Effect of Copyrighting Software Developed at Public Expense

The making of derivative software from software funded at public expense can also be a complicated problem if the developer of the original software has copyrighted the software (as the standard data rights clause permits) and if a different company is selected to prepare the derivative software for the government. As was pointed out above, it is not entirely clear that the government has the right to authorize the making of derivatives. For the moment, let's assume it does. That still doesn't mean that there are no limits on the government's ability to authorize the creation of derivatives. One provision of the standard data rights clause suggests that the government's rights to do various things with copyrighted software and to authorize others to do the same is limited to circumstances in which they are done for governmental purposes. The regulation is somewhat ambiguous in this respect, but it may be that the effect of a contractor's copyrighting software it has developed with government funding will be to narrow the scope of the government's rights in that software from an "any purpose" license to a "government purposes" license, that is, to contract the scope of unlimited rights.

This contraction of the government's rights may be particularly important as to the creation of derivative software, for it may permit the original developer (insofar as it may be a copyright owner) to control distribution of derivative software prepared by a second firm to anyone besides the government. That is, the first firm may not be able to prevent a second firm from preparing a derivative program for the government, but it may at least be able to prevent the second firm from copyrighting the derivative and selling it widely to commercial customers. The government cannot give to the second firm a wider set of rights than the first firm has given to the government. And if the second firm -- even with the government's permission -- exceeds the scope for the government's license, it may be enjoined from infringing the first firm's copyright, and thus be unable to bring the derivative to market.

The Policy When Software Is Developed At Private Expense

Having now a clearer understanding of the risks and uncertainties involved when a firm accepts government funding for software development, a software firm may prefer to find some independent source of funding for the software to avoid the problems just described. The firm may think, "Well, at least if it's privately developed, I'll be able to restrict the government's use of it." To an extent, this is true; to an extent, it may not be true. In the event a contractor firm uses its own funds for software development as a way of ensuring its ability to restrict the government's rights in the software, the firm should realize that it must still follow a circuitous path through the data rights regulations to secure the restricted rights protection it may be seeking.

Commercial Software: The Option

One of the potentially helpful provisions for industry as to privately developed "commercial software" that it may take some experience with the clause to discern is that the standard data rights clause allows contractors to opt whether to have their commercial software treated as

"commercial software" or as "other-than-commercial software." (What qualifies as "commercial software" is not clear from the regulatory definition; it seems to be interpreted to reach off-the-shelf software that has a substantial commercial distribution.)

The primary advantage of having one's software treated as "commercial software" is that its documentation will be subject to the same "restricted rights" as applies to the machine-readable code instead of being subject to the broader limited (i.e., government-wide) rights that pertain to other documentation. The primary disadvantage of opting for commercial software treatment is that there is a fixed and unnegotiable set of terms that will apply to the code and the documentation; no further terms can be negotiated. Some firms with commercial software prefer to be able to negotiate additional terms, and thus exercise the option to have commercial software treated as other-than-commercial-software.

Other Than Commercial Software: A "Booby Trap"

The DoD standard data rights clause contemplates that when DoD acquires other-than-commercial-software that has been developed at private expense, a separate licensing agreement will be negotiated between the government and the software firm which will then be made part of the government contract. The DoD must only get the standard four minimum rights in the software.

An interesting question is: what happens if the firm fails to negotiate a separate license agreement and have the agreement made part of the government contract? A cursory reading of the standard data rights clause might suggest to an industry person that if no license agreement was entered into between the government and the contractor, the government would have no more than the four standard minimum rights in the software. However, a closer reading of the clause itself indicates that the failure to negotiate a separate license or the failure to have a separate agreement made part of the government contract may instead mean that the government will have unlimited rights in the software (that is, at least, in the machine-readable code). This may strike software industry people as unreasonable, but it is the result a close reading of the regulations seems to contemplate for those who don't negotiate a separate agreement and have it made part of the contract. It would certainly be prudent to negotiate a separate licensing agreement and have it made part of the contract if a firm wants to ensure that its privately developed software will be subject to tight restrictions.

Other Technicalities

Similarly, the failure of the contractor to put a restrictive notice on the software or documentation, or the failure of the contractor to identify in his proposal a piece of software as to which he desires to negotiate restricted rights could result in the government's claiming unlimited rights in that software, even if the software was developed wholly with private funds. Further, even if the software and documentation was developed wholly at private expense, and even if one has been careful to comply with the technical requirements of the regulations, a software firm might be

threatened with loss of its limited (or restricted) right protection for software documentation to the extent that the documentation has been incorporated into a manual or other instructional material prepared for or required to be delivered under the government contract to assist with installation, operation, maintenance, or training. The government claims unlimited rights in all such manuals and materials. Unfortunately, virtually any piece of software documentation could arguably be construed to be within this rule, so there would seem to be within the regulation yet another potential pitfall.

Conclusion

Given this complicated and ambiguous regulatory environment, it is understandable that a software firm that might be jealously guarding its software and documentation in order to preserve its competitive edge in the marketplace might be somewhat reluctant to do business with the Defense Department. It is a system in which the Defense Department's contracting personnel have their hands tied. Short of getting permission to grant a deviation, it would appear that contract officers have no authorization to make deals that go against clear provisions of the standard data rights clause.

The fact that a contract officer would even consider entering into special agreements as well as honoring them, despite a lack of authority to do so, serves as a testament to the goodwill and reasonableness of the many DoD personnel who want the government to get good technology, and who realize that if the standard data rights policy is always insisted upon and enforced, a lot of excellent software technology will not be made available to the government. It is unfortunate that the Defense Department's procurement regulations make the job so difficult for them, and at the same time, put at risk software firms who want to believe that the government can accommodate their needs for protection of software, and who want to make their technology available to the government on fair and reasonable terms.

Why are the Defense Department regulations so difficult to change? Well, that, as they say, is another story. Until the regulations are altered to accommodate the needs and interests of those in DoD who want access to the highest quality software technology and of those who can supply it, software vendors must be prepared to journey through a complex and sometimes frustrating regulatory maze.

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